

### Abstract

A vapor decontamination system for decontaminating a defined region. The system is comprised of a chamber defining a region, and a generator for generating vaporized hydrogen peroxide from a solution of hydrogen peroxide and water. A closed loop circulating system is provided for supplying the vaporized hydrogen peroxide to the region. A destroyer within the closed loop circulating system breaks down the vaporized hydrogen peroxide. A bypass conduit is provided to bypass the destroyer. A controller causes vaporized hydrogen peroxide from the generator to bypass the destroyer during a predetermined phase of operation.